

CLAIMS

- 1) A plant for unloading stacks (5) of thermoformed products from a cage (4) containing stacks (5), which comprises a support structure (2), at least one support plate (3) for a respective cage (4) containing stacks (5), which is mounted for rotation on said support structure (2), drive means (8) to cause said support plate (3) to effect angular movements of a preset amplitude around a horizontal axis, so as to angularly move its respective containing cage (4) between an erect position, in which the stacks (5) of thermoformed products contained therein extend in a substantially vertical direction, and an inclined unloading position, expeller means (12) designed to expel stacks (5) of thermoformed objects from said cage (4) when said support plate (3) is in inclined unloading position, and a conveyer (20) for receiving stacks (4) of thermoformed objects unloaded from said containing cage (4) located downstream of the unloading position of said support plate (3).
- 2) A plant according to claim 1, comprising drive means (7,18) arranged to vertically move the said support plate (3) between a plurality of unloading positions to unload stacks (5) of thermoformed objects at different levels onto said receiving conveyer (20).
- 3) A plant according to claim 1, wherein said receiving conveyer (20) is hinged about a horizontal axis and has actuating means (22) to arrange itself into inclined position substantially at the same angle of inclination as the said support plate (3) in its inclined unloading position.
- 4) A plant according to claim 1, comprising a couple of moving guides (25, 26) extending above and parallel to the direction of movement of said receiving conveyer (20) and spaced from one another by a distance substantially equal in length to the height of the stacks (4) to be transported.
- 5) A plant according to claim 4, wherein the slide guide (25) next to the said support plate (3) is shorter than the other (26) by (a length) at the said support plate (3).
- 6) A plant according to claim 4, wherein said pair of guides is spaced by an adjustable distance from each other.
- 7) A plant according to claim 1, wherein said receiving conveyer (20) has transverse and parallel partitions (28) for the stacks (5).
- 8) A plant according to claim 7, wherein said receiving conveyer (20) takes, when loaded with stacks (5) of thermoformed objects, an attitude in accordance with to a handling system placed downstream of said taking away conveyer (20).

- 9) A plant according to claim 1, comprising in combination a device (30) for transferring stacks or portions of stacks (5, 5a, 5b), positioned upstream of said support plate (3), a stacking station (31) of thermoformed objects designed to feed the said transfer device (30), and a rotating conveyer (32) with several template-carrying radial arms for mouldings of thermoformed objects.

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